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996 Attorney's Docket No. 46963

PATENT

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Box Patent Application Assistant Commissioner for Patents Washington, D.C. 20231

### **NEW APPLICATION TRANSMITTAL**

Transmitted herewith for filing is the patent application of

inventor(s):

Jeffrey M/ Isner and Takayuki Asahara

WARNING: Patent must be applied for in the name(s) of all of the actual inventor(s). 37 CFR 1.41(a) and 1.53(b).

For (title):

METHODS FOR REGULATING ANGIOGENESIS

#### CERTIFICATION UNDER 37 CFR 1.10

I hereby certify that this New Application Transmittal and the documents referred to as enclosed therein are being deposited with the United States Postal Service on this date  $\frac{November\ 8}{1996}$ , in an envelope as "Express Mail Post Office to Addressee" Mailing Label Number  $\frac{TB498182410}{1996}$ , addressed to the: Assistant Commissioner for Patents, Washington, D.C. 20231.

Noreen Buckley

(type or print name of person mailing paper)

Signature of person mailing paper

NOTE: Each paper or fee referred to as enclosed herein has the number of the "Express Mail" making label placed thereon prior to mailing. 37 CFR 1.10(b).

**WARNING:** Certificate of mailing (first class) or facsimile transmission procedures of 37 CFR 1.8 cannot be used to obtain a date of mailing or transmission for this correspondence.

(Application Transmittal [4-1]—page 1 of 9)

# 1. Type of Application

This new application is for a(n)

(check one applicable item below)

⊠ Ori	ginal (nonprovisional)
☐ Des	sign
	Plant
U.	o not use this transmittal for a completion in the U.S. of an International Application under 35 $\circ$ S.C. 371(c)(4), unless the International Application is being filed as a divisional, continuation of continuation-in-part application.
WARNING: D	o not use this transmittal for the filing of a provisional application.
ITANS	of the following 3 items apply, then complete and attach ADDED PAGES FOR NEW APPLICATION SMITTAL WHERE BENEFIT OF A PRIOR U.S. APPLICATION CLAIMED and a NOTIFICATION RENT APPLICATION OF THE FILING OF THIS CONTINUATION APPLICATION.
	isional.
☐ Cor	ntinuation.
☐ Cor	ntinuation-in-part (C-I-P).
2. Benefit of	Prior U.S. Application(s) (35 U.S.C. 119(e), 120, or 121)
NOTE: If the ne case, o of a pri ADDED	ew application being transmitted is a divisional, continuation or a continuation-in-part of a parent or where the parent case is an International Application which designated the U.S., or benefit for provisional application is claimed, then check the following item and complete and attach PAGES FOR NEW APPLICATION TRANSMITTAL WHERE BENEFIT OF PRIOR U.S. APPLICA-
ear (35 app app by ear of	an application claims the benefit of the filing date of an earlier filed application under 35 U.S.C. 0, 121 or 365(c), the 20-year term of that application will be based upon the filing date of the rliest U.S. application that the application makes reference to under 35 U.S.C. 120, 121 or 365(c). 5 U.S.C. 154(a)(2) does not take into account, for the determination of the patent term, any plication on which priority is claimed under 35 U.S.C. 119, 365(a) or 365(b).) For a c-i-p plication, applicant should review whether any claim in the patent that will issue is supported an earlier application and, if not, the applicant should consider canceling the reference to the rlief filed application. The term of a patent is not based on a claim-by-claim approach. See Notice April 14, 1995, 60 Fed. Reg. 20,195, at 20,205.
pro	nen the last day of pendency of a provisional application falls on a Saturday, Sunday, or Federal liday within the District of Columbia, any nonprovisional application claiming benefit of the ovisional application must be filed prior to the Saturday, Sunday, or Federal holiday within the strict of Columbia. See 37 C.F.R. § 1.78(a)(3).
tion(	new application being transmitted claims the benefit of prior U.S. applica- (s) and enclosed are ADDED PAGES FOR NEW APPLICATION TRANSMIT- WHERE BENEFIT OF PRIOR U.S. APPLICATION(S) CLAIMED.
3. Papers En	closed That Are Required for Filing Date under 37 CFR 1.53(b) or 37 CFR 1.153 (Design) Application
41 Pages	of specification
_	of claims
Pages	of Abstract
6 Sheets	of drawing
☐ form	al <sub>.</sub>
🖆 infor	mai
	(Application Transmittal [4-1]—page 2 of 9)

WARNING: DO NOT submit original drawings. A high quality copy of the drawings should be supplied when filling a patent application. The drawings that are submitted to the Office must be on strong, white, smooth, and non-shiny paper and meet the standards according to § 1.84. If corrections to the drawings are necessary, they should be made to the original drawing and a high-quality copy of the corrected original drawing then submitted to the Office. Only one copy is required or desired. Comments on proposed new 37 CFR 1.84. Notice of March 9, 1988 (1990 O.G. 57-62).

NOTE: "Identifying indicia, if provided, should include the application number or the title of the invention, inventor's name, docket number (if any), and the name and telephone number of a person to call if the Office is unable to match the drawings to the proper application. This information should be placed on the back of each sheet of drawing a minimum distance of 1.5 cm. (5/8 inch) down from the top of the page." 37 C.F.B. 1.84(c)).

			back of each sneet of drawing a minimum distance of 1.5 cm. (5/8 inch) down from the top page." 37 C.F.R. 1.84(c)).
			(complete the following, if applicable)
			e enclosed drawing(s) are photograph(s), and there is also attached a TITION TO ACCEPT PHOTOGRAPH(S) AS DRAWING(S)." 37 C.F.R. 1.84(b).
4.	Addiți	ional	papers enclosed
		Pre	liminary Amendment
		Info	rmation Disclosure Statement (37 CFR 1.98)
		For	m PTO-1449
		Cita	etions
		Dec	claration of Biological Deposit
		per	omission of "Sequence Listing," computer readable copy and/or amendment taining thereto for biotechnology invention containing nucleotide and/or no acid sequence.
		Aut tive	horization of Attorney(s) to Accept and Follow Instructions from Representa-
		Spe	ecial Comments
		Oth	er
5.	Decla	ratio	on or oath
		End	closed
		Exe	ecuted by
	•		(check all applicable boxes)
			inventor(s).
			legal representative of inventor(s). 37 CFR 1.42 or 1.43.
			joint inventor or person showing a proprietary interest on behalf of inventor who refused to sign or cannot be reached.

Not Enclosed.

fee.

WARNING: Where the filing is a completion in the U.S. of an International Application, but where a declaration is not available, or where the completion of the U.S. application contains subject matter in addition to the International Application, the application may be treated as a continuation or continuation-inpart, as the case may be, utilizing ADDED PAGE FOR NEW APPLICATION TRANSMITTAL WHERE BENEFIT OF PRIOR U.S. APPLICATION CLAIMED.

This is the petition required by 37 CFR 1.47 and the statement required by 37 CFR 1.47 is also attached. See item 13 below for

Application is made by a person authorized under 37 CFR 1.41(c) on behalf of all the above named inventor(s).
(The declaration or oath, along with the surcharge required by 37 CFR 1.16(e) can be filed subsequently).
NOTE: It is important that all the correct inventor(s) are named for filing under 37 CFR 1.41(c) and 1.53(b).
Showing that the filing is authorized. (not required unless called into, question. 37 CFR 1.41(d))
6. Inventorship Statement
WARNING: If the named inventors are each not the inventors of all the claims an explanation, including the ownership of the various claims at the time the last claimed invention was made, should be submitted.
The inventorship for all the claims in this application are:
☐ The same.
or
<ul> <li>Not the same. An explanation, including the ownership of the various claims at the time the last claimed invention was made,</li> </ul>
is submitted.
☐ will be submitted
7. Language
NOTE: An application including a signed oath or declaration may be filed in a language other than English. A verified English translation of the non-English language application and the processing fee of \$130.00 required by 37 CFR 1.17(k) is required to be filed with the application, or within such time as may be set by the Office. 37 CFR 1.52(d).
NOTE: A non-English oath or declaration in the form provided or approved by the PTO need not be translated. 37 CFR 1.69(b).
Î English
☐ Non-English
☐ The attached translation is a verified translation. 37 CFR 1.52(d).
8. Assignment
☐ An assignment of the invention to
□ is attached. A separate □ "COVER SHEET FOR ASSIGNMENT (DOCUMENT) ACCOMPANYING NEW PATENT APPLICATION" or □ FORM PTO 1595 is also attached.
☑ will follow.
NOTE: "If an assignment is submitted with a new application, send two separate letters-one for the application and one for the assignment." Notice of May 4, 1990 (1114 O.G. 77-78).
WARNING: A newly executed "CERTIFICATE UNDER 37 CFR 3.73(b)" must be filed when a continuation-in-part application is filed by an assignee. Notice of April 30, 1993, 1150 O.G. 62-64.
(Application Transmittal [4-1]—page 4 of 9)

(Rel.65-10/95 Pub.605) FORM 4-1 4-6

9.	Cert	ified	Copy	1
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Certified	copy(ies)	of	application(	S	)
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country	appin. no.		filed
country	appln. no.		filed
country	appln. no.		filed
from which priority is claimed	I		
☐ is (are) attached.			
□ will follow.			
NOTE: The foreign application for declaration. 37 CFR 1.55(6)	rming the basis for the claim for a) and 1.63.	priority must be re	eferred to in the oath or
120 is itself entitled to price	n priority for which the applicational Application from which this prity from a prior foreign application TRANSMITTAL WHERE	s application claims tion, then complete	benefit under 35 U.S.C. item 18 on the ADDED
10. Fee Calculation (37 CF	R 1.16)		
A.   Regular application	n		
	CLAIMS AS FILED		
Number filed	Number Extra	Rate	Basic Fee 37 CFR 1.16(a) \$750.00
Total			
Claims (37 CFR 1.16(c)) -	20 = X	\$ 22.00	
Independent Claims (37 CFR 1.16(b)) -	3 = ×	\$ 78.00	· ·
Multiple dependent claim(s), if any (37 CFR 1.16(d))	+	\$250.00	
☐ Amendment cance	elling extra claims enclose	ed.	
Amendment deleti	ing multiple-dependencies	enclosed.	
☐ Fee for extra clair	ns is not being paid at th	is time.	•
	are not paid on filing they must be the time period set for response	e paid or the claims by the Patent and	cancelled by amendmen: I Trademark Office in an

Filing Fee Calculation

B.		Design application (\$310.00—37 CF	on R 1.16(fl)	•	
			Filing Fee Calcula	ation	<b>S</b> .
C.		Plant application			Ψ
		(\$510.00—37 CF	R 1.16(g))		
			Filing fee calculat	tion	\$
11.	Sma	Il Entity Stateme	nt(s)		
		Verified Statemer 1.27 is (are) attack	it(s) that this is a fili ched.	ing by a small entity	y under 37 CFR 1.9 and
WAF	RNING	including application or patent in which the under 35 U.S.C. 11 filed in the prior apstatement in the prior apstatement in the prior applications.	is or patents which are he status has been esta 9(e), 120, 121 or 365(c) o plication if the nonprov	directly or indirectly de blished. A nonprovision of a prior application ma isional application inclu- les a copy of the verifie	any other application or patent, spendent upon the application all application claiming benefit ay rely on a verified statement uses a reference to a verified at the prior 7 C.F.R. § 1.28(a).
		(00	omplete the following	ng, if applicable)	
		Status as a small	entity was claimed	d in prior application	חמ
		/	, filed o	on	, from which benefit
		35 U.S.C.   1   1   1	19(e), 20,	under:	
		and which status	s as a small entity	is still proper and	desired.
•					ication is included.
Filing	Fee	Calculation (50%	of A, B or C above	e)	\$
	: An	y excess of the full fee	paid will be refunded in	f a verified statement a	nd a refund request are filed anth period is not extendable
12. F	₹equ	est for Internation	nal-Type Search (3	37 CFR 1.104(d))	
			(complete, if ap	plicable)	•
		Please prepare an when national exa	international-type so mination on the me	earch report for this erits takes place.	application at the time
•					
				(Application Tran	nsmittal [4-1]—page 6 of 9)

(Rel.65-10/95 Peb.695) FORM 4-1 4-8

14.

1.22(b).

13. F	ee F	ayı	ment Being Made at This Time	
	XX		: Enclosed	
		Φx	No filing fee is to be paid at this time. (This and the surcharge required by 37 CFR quently.)	1.16(e) can be paid subse
		Enc	elosėd	
			Basic filing fee	\$
			Recording assignment (\$40.00; 37 CFR 1.21(h)) (See attached "COVER SHEET FOR ASSIGNMENT ACCOMPANYING NEW APPLICATION".)	\$
			Petition fee for filing by other than all the inventors or person on behalf of the inventor where inventor refused to sign or cannot be reached. (\$130.00; 37 CFR 1.47 and 1.17(h))	\$
			For processing an application with a specification in a non-English language. (\$130.00; 37 CFR 1.52(d) and 1.17(k))	\$
			Processing and retention fee (\$130.00; 37 CFR 1.53(d) and 1.21(l))	\$
			Fee for international-type search report (\$40.00; 37 CFR 1.21(e))	\$
NOTE:	1.53 filing	and fee	1.21(I) establishes a fee for processing and retaining any application pursuant to 37 CFR 1.53(d) and this, as 1.78, indicate that in order to obtain the benefit of a prior of must be paid, or the processing and retention fee of § 1.21(I) on under § 53(d).	well as the changes to 37 CFR
			Total fees enclosed	\$
4. M	etho	d of	f Payment of Fees	
E			k in the amount of \$	
	) C	har du	ge Account No in the amount plicate of this transmittal is attached.	of \$
NOTE:			uld be itemized in such a manner that it is clear for which pu	rpose the fees are paid. 37 CFR

15. Auth	horization to Charge Additional	Fees
WARNING	G: If no fees are to be paid on filing, th	e following items should <u>not</u> be completed.
WARNING	G: Accurately count claims, especially m if extra claim charges are authorized.	ultiple dependent claims, to avoid unexpected high charges,
		thorized to charge the following additional fees tire pendency of this application to Account No.
	37 CFR 1.16(a), (f) or (g) (f	iling fees)
	(d) 37 CFR 1.16(b), (c) and (d)	(presentation of extra claims)
n si a	must only be paid or these claims cancel set for response by the PTO in any notice	ple dependent claims not paid on filing or on later presentation led by amendment prior to the expiration of the time period e of fee deficiency (37 CFR 1.16(d)), it might be best not to m fees, except possibly when dealing with amendments after
		for filing the basic filing fee and/or declaration ing date of the application)
	☐ 37 CFR 1.17 (application p	processing fees)
WARNING	should be made only with the knowled	eal with extensions of time under § 1.136(a), this authorization dge that: "Submission of the appropriate extension fee under a request or petition for extension is filed." (Emphasis added). D.G. 27).
NOTE: V	to 37 CFR 1.311(b))  Where an authorization to charge the issu	r before mailing of Notice of Allowance, pursuant e fee to a deposit account has been filed before the mailing
	of a Notice of Allowance, the issue fee will of mailing the notice of allowance. 37 CF	be automatically charged to the deposit account at the time R 1.311(b).
b 0	be filed in the application prior to payil of 37 CFR 1.28(b): (a) notification of chan	ony change in loss of entitlement to small entity status musting, or at the time of paying, issue fee." From the wording ge of status must be made even if the fee is paid as "other in is required if the change is to another small entity.
16. Insti	ructions as to Overpayment	
$\boxtimes$	Credit Account No. 04-1105	· · · · · · · · · · · · · · · · · · ·
	Refund	MIAn
		SIGNATURE OF ATTORNEY
Reg. No.	34,235	David S. Resnick
Tal No. /	( (17	(type or print name of attorney)
Tel. No. (	(617) 523-3400	Dike, Bronstein, Roberts & Cushman, LLP P.O. Address 130 Water Street Boston, Massachusetts 02109-4280

(Application Transmittal [4-1]—page 8 of 9)

	Incor	poration by reference of added pages
		(check the following item if the application in this transmittal claims the benefit of prior U.S. application(s) (including an international application entering the U.S. stage as a continuation, divisional or C-I-P application) and complete and attach the ADDED PAGES FOR NEW APPLICATION TRANSMITTAL WHERE BENEFIT OF PRIOR U.S. APPLICATION(S) CLAIMED)
		Plus Added Pages for New Application Transmittal Where Benefit of Prior U.S Application(s) Claimed
		Number of pages added
		Plus Added Pages for Papers Referred to in Item 4 Above
		Number of pages added
		Plus "Assignment Cover Letter Accompanying New Application"
		Number of pages added
x.x	State	ment Where No Further Pages Added
		(if no further pages form a part of this Transmittal, then end this Transmittal with this page and check the following item.)
	X	This transmittal ends with this page.

## TRANSMITTAL OF PAYMENT OF ISSUE FEE (Small Entity) Docket No. (37 C.F.R. 1.311) 46963 Jeffréy M. Isner and Takayuki Asahara Applicant(s) Examiner Group Art Unit Batch No. Serial No. Filing Date 1644 .08/744,882 11/08/96 Gambel, P. M62 Invention: METHODS FOR ENHANCING ANGIOGENESIS WITH ENDOTHELIAL PROGENITOR CELLS (as amended) TO THE ASSISTANT COMMISSIONER FOR PATENTS Washington, D.C. 20231 Attention: Box Issue Fees Transmitted herewith are the following for the above-identified application. Issue Fee Transmittal Form PTOL-85 Utility Fee: Design Fee: Plant Fee: \$ 605.00 A Verified Small Entity Statement Is Attached. Was Filed On: 2/5/97 Date $\boxtimes$ A check in the amount of \$635.00 is attached. $\boxtimes$ The Assistant Commissioner is hereby authorized to charge and credit Deposit Account No. 04-1105 as described below. A duplicate copy of this sheet is enclosed. Charge the amount of $\boxtimes$ Credit any overpayment. $\boxtimes$ Charge any additional fee required. Dated: 12/29/98 David S. Resnick (Reg. No. 34,235) I certify that this document and fee is being deposited on with the U.S. Postal Service as first class mail under 37 C.F.R. 1.8 and is addressed to the Dike, Bronstein, Roberts & Cushman, LLP 130 Water Street **Boston**, MA 02109 Assistant Commissioner for Patents, Washington, D.C. 20231. Signature of Person Mailing Corresp

CC:

Noreen Buckley

Typed or Printed Name of Person Mailing Correspondence